PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7:
A43C

(11) International Publication Number: WO 00/35308

(43) International Publication Date: 22 June 2000 (22.06.00)

(21) International Application Number: PCT/KR99/00780

(22) International Filing Date: 17 December 1999 (17.12.99)

(30) Priority Data:

1998/055767 17 December 1998 (17.12.98) KR 1999/0012431U 30 June 1999 (30.06.99) KR 1999/0028410U 16 December 1999 (16.12.99) KR

(71)(72) Applicant and Inventor: OH, Young, Kyun [KR/KR]; #415–12 Jangjun–dong, Gumjung–gu, Busan 609–390 (KR).

(74) Agent: HWANG, Byung, Do; Regent Officetel Building, Room 206, #547-8, Kuui-dong, Kwangjin-ku, Seoul 143-709 (KR).

(81) Designated States: AE, AT, AU, BR, CA, CN, CU, HU, ID, IL, IN, IS, JP, MX, NO, NZ, PL, RO, RU, SG, TR, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

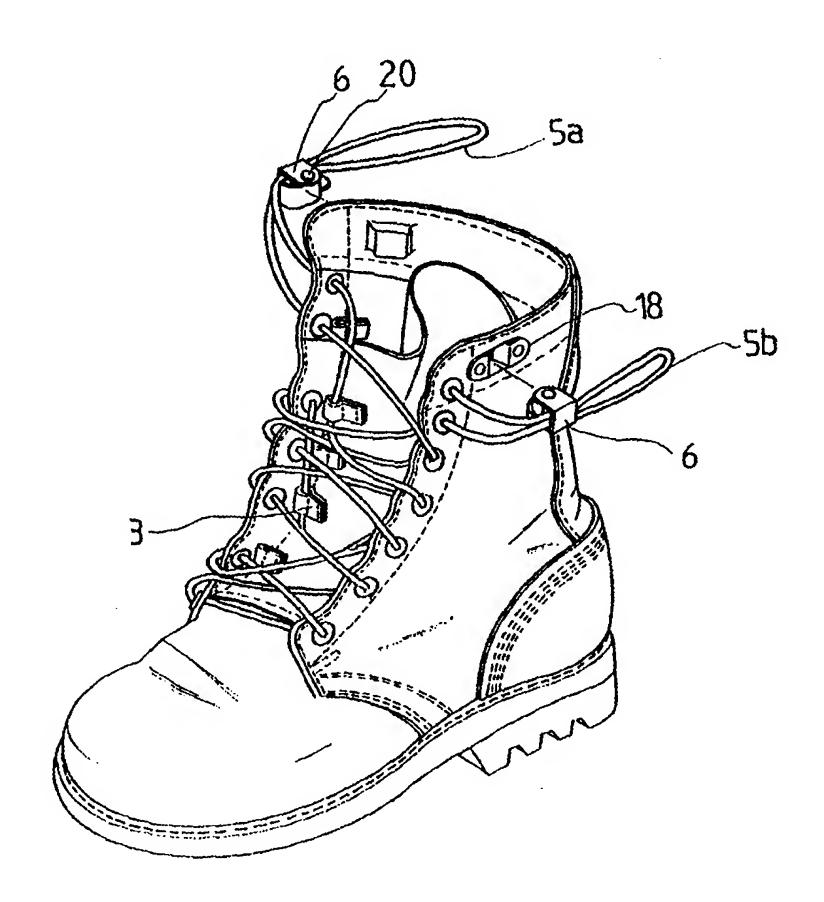
Published

In English translation (filed in Korean). Without international search report and to be republished upon receipt of that report.

(54) Title: SHOES WHOSE SHOELACE IS TIGHTENED BY ONE PULLING

(57) Abstract

Shoes of which shoelace is tightened by one pulling for the shoes such as gym shoes, basketball shoes or military shoes. At the present, the shoes which have a shoelace provide a difficulty with tightening or loosing the shoelace (100) repeatedly by pulling the cross parts (100a) of the shoelace (100) when they put on or put off their shoes, because the shoelace (100) is inserted into eyelets (120) of two eyelet tabs (110) on the right and left side using aglet (130). People should pull the cross parts (100a) repeatedly according the number of eyelets (120) at two eyelets of intervals because in case of fastening the shoelace (100), the shoelace (100) is pulled to the second eyelet (120) but it can not be pulled more due to pulling the aglets (130) when the shoelace (100) is inserted into the eyelets (120) crossed each other. In order to overcome such drawbacks, a sub-hole is formed inside of the eyelet tab at two eyelets of intervals and the shoelace inserted into the sub-hole is to be pulled to more than two eyelets, so that the shoelace can be pulled to the forth eyelet with one pulling, which the shoelace can be pulled to the eighth eyelet at a time.



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

·

\mathbf{AL}	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
$\mathbf{B}\mathbf{A}$	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
$\mathbf{B}\mathbf{B}$	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
\mathbf{BE}	Belgium	GN	Guinea	MK	The former Yugoslav	TM	Turkmenistan
\mathbf{BF}	Burkina Faso	GR	Greece		Republic of Macedonia	TR	Turkey
\mathbf{BG}	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
\mathbf{BJ}	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	$\mathbf{U}\mathbf{Z}$	Uzbekistan
CF	Central African Republic	JР	Japan	NE	Niger	VN	Viet Nam
\mathbf{CG}	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	$\mathbf{z}\mathbf{w}$	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CM	Cameroon		Republic of Korea	\mathbf{PL}	Poland		
CN	China	KR	Republic of Korea	\mathbf{PT}	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
\mathbf{CZ}	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
\mathbf{EE}	Estonia	LR	Liberia	\mathbf{SG}	Singapore		

Shoes whose shoelace is tightened by one pulling

BACKGROUND OF THE INVENTION

The present invention relates to shoes whose shoelace is tightened by one pulling for the shoes such as gym shoes, basketball shoes or military shoes.

5

10

15

25

30

At the present, the shoes which have a shoelace provide a difficulty with tightening or loosing the shoelace (100) repeatedly by pulling the cross parts (100a) of the shoelace (100) when they put on or put off their shoes because the shoelace (100) is inserted into eyelets (120) of two eyelet tabs (110) on the right and left side using an aglet (130) as shown in Fig. 9.

People should pull the cross parts (100a) repeatedly according to the number of eyelets (120) at two eyelets of intervals, because in case of fastening the shoelace (100), the shoelace (100) is pulled only to the second eyelet (120) and it can not be pulled more than two due to pulling the aglet (130) when the shoelace (100) is inserted into the eyelets (120) crossed each other.

Therefore, in recent years, the eyelets (120) which are to be inserted the shoelace (100) are formed in the amount that can be pulled at once and hooks (140) in which the shoelace is not inserted but hooked, are formed on the rest space as shown in Fig. 9, so that it makes tightening and loosing the shoelace easy when they put on or off their shoes. However, this method gives us inconvenience with hooking one by one and being loosened easily. Moreover, this kind of design is not good to be applied to fashion shoes.

SUMMARY OF THE INVENTION

In view of the above, the present invention is contrived in order to overcome such drawbacks in the conventional art. The disclosed invention is advantageous in that it provides shoes whose shoelace is strained by one pulling using two shoelaces and the forward part of one shoelace is passed from the left to the right and the forward part of the other shoelace is passed from the right to the left, so that each forward part of the shoelaces is to be connected. Noticed the shoelace can be pulled to the second eyelet easily, a sub-hole is formed inside of the eyelet tab at two eyelets of intervals and the shoelace inserted into the sub-hole is to be pulled to more than two eyelets, so that the shoelace can be pulled to the forth eyelet with one pulling, which the shoelace can be

2

pulled to the eighth eyelet at a time.

10

15

25

30

35

BRIEF DESCRIPTION OF THE DRAWINGS

- FIG. 1 is a perspective view showing the preferred embodiment of the present invention;
 - FIG. 2 is a perspective view showing another embodiment of the present invention;
 - FIG. 3 is a perspective view showing the combination of one shoelace of the present invention;
 - FIG. 4 is a perspective view showing the combination of the other shoelace of the present invention;
 - FIG. 5 is a perspective view showing the sub-hole formed with the eyelet of the present invention;
 - FIG. 6 is a perspective view showing the state before the combination of a fixing part and the hook of the present invention;
 - FIG. 7 is a perspective view showing the combination of Fig. 6;
 - FIG. 8 is a perspective view showing the shoelace which is not combined with the fixing part and the hook; and
- FIG. 9 is a perspective view showing the method inserting the shoelace of the prior art.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

From the following, the most desirable embodiment of this invention will be described in detail according to the attached drawings.

First of all, more than two eyelets which are formed on the eyelet tab and two of shoelaces are used for the present invention or only one shoelace can be used.

Furthermore, a seaming part (4) can be made by a certain method of sewing or by the method of assembling metal in the cross part of two shoelaces (5a, 5b).

As shown in Fig. 1 to Fig. 4, configuration of the present invention is that two shoelaces (5a, 5b) are crossed each other and inserted into the sub-hole (1) which is formed at two eyelets (120) of intervals.

To describe in detail, a wing strip (3) which is formed the sub-hole (1) at two eyelets (120) of intervals inside of the eyelet tab (110) which is formed eyelets in continuous arrangement is sewn. At this point, if the wing strip (3) which is formed the sub-hole (1) is combined together when the eyelet (120) is combined with the eyelet tab

3

(110), the cost can be cut as a result of not using another method of sewing.

5

10

15

20

25

30

35

Moreover, two shoelaces (5a, 5b) are used for the present invention, the forward part of one shoelace is passed from the left to the right as shown in Fig. 4 and the forward part of the other shoelace is passed from the right to the left as shown in Fig. 3, so the exposed forward parts of each shoelace are connected and formed a fixing part (2). Therefore, each shoelace (5a, 5b) passes through the sub-hole (1) which is formed inside of the eyelet tab (110) at two eyelets (120) of intervals and again passes through the eyelet (120) and the sub-hole (1) which is formed at two eyelets (120) of intervals.

At this moment, a hook wing (8) which has a puncture (16) on both sides of a fixing body (6) is installed at the fixing part (2), so two of shoelaces (5a, 5b) coming from the eyelet (120) can pass through the hook wing (8).

On the other hand, a fixing assembly (11), which is formed a supporting protrusion (10) which is formed a hook ledge (14) and a puncture (16a), is combined with the hook wing (8) by a pin (20), and the fixing assembly (11) is to be turned around using the pin (20), so that after the hook ledge (14) of the fixing assembly (11) presses the shoelaces (5a, 5b) and the shoelaces (5a, 5b) are fixed, the fixing body (6) is pressed and inserted a hook (18) which is fixed on the forward part of the shoes. Then the shoelaces (5a, 5b) are fixed by the hook.

At this point, a protecting protrusion from detachment (7) is formed in the hook ledge (14) of the fixing assembly (11) by the pressing method of drawing and located between the shoelaces (5a, 5b) which is passed through the hook wing (8), so that the shoelaces (5a, 5b) can not be slipped away incidently even without the pressure.

Furthermore, the hook (18) which is included the fixing body (6) has elasticity coming from a tetragonal box made of a bent metal board with the result that the fixing body (6) can be inserted easily. A hooking sill (24) is formed on the forward part of two facets of the box confronted each other in order that the fixing body (6) which is inserted may not be removed and a combining strip (12) is prolonged and installed on another two facets for combining with the shoes.

At this time, the combining strip (12) is bent at the front part of the hook (18) and inserted into the hole (9) and fixed on the forward part of the shoes by rebating a puncture (16b) which is formed on the combining strip (12), so the protruded part is to be minimized.

Moreover, as shown on Fig. 2, a supporting strip (26) is attached on the wing strip (3) which is formed the sub-hole (1), so that an occurrence such as the sub-hole (1) is hard on one's instep by pressure of the shoelaces (5a, 5b) is avoided and the feeling of

4

putting on can be great.

5

10

15

20

Furthermore, the seaming part (4) is formed on the rear cross part of the shoelaces (5a, 5b) and this seaming part (4) can be moved and hidden by the eyelet tab (110) as shown in Fig. 1.

Also, the forward part of one shoelace (5a) and the forward part of the other shoelace (5b) are connected each other and installed the fixing part (2), so that the shoelaces (5a, 5b) can not be slipped away incidently. In this case, if just one shoelace is used for the present invention, the fixing part (2) does not need indeed.

Thus, two of shoelaces (5a, 5b) which is connected by the fixing part (2) can be pulled by hands one after the other, so that one shoelace of the shoelaces (5a, 5b) can be pulled to the forth eyelet (120) with one pulling and the other shoelace can be pulled to the forth as well, which the shoelace can be pulled to the eighth eyelet at a time.

In addition, the shoelaces (5a, 5b) which are inserted into the eyelet (120) of two intervals pass through the sub-hole (1) which is formed in the wing strip (3) and again the shoelaces (5a, 5b) are inserted into the eyelet (120) of two intervals, so the shoelaces (5a, 5b) can be pulled easily by the sub-hole (1).

In this state, the shoelaces (5a, 5b) can be pulled by the fixing assembly (11) also without any trouble.

And the shoelaces (5a, 5b) are to be fixed finally when they are inserted into the hook (18).

As described above, the present invention is advantageous in that each of shoelaces in the left and right side can be pulled to the forth eyelet with one pulling and in case of loosening, the shoelaces can be loosened to the forth eyelet by one pulling as well.

5

What is claimed:

5

10

15

20

25

30

1. Shoes whose shoelace is tightened by one pulling wherein comprising:

a wing strip (3) which is formed a sub-hole (1) at two eyelets (120) of intervals inside of an eyelet tab (110) which is formed eyelets in continuous arrangement is sewn;

two of shoelaces (5a, 5b) to be crossed each other and inserted into the subhole (1) which is formed at two eyelets (120) of intervals.

- 2. Shoes of whose shoelace is tightened by one pulling, wherein a supporting strip (26) is formed with a wing strip (3) which is formed the sub-hole, so that the feeling of putting on can be great.
- 3. Shoes whose shoelace is tightened by one pulling in accordance with claim 1, wherein a fixing buckle (11) is formed on both sides of the shoelaces and a hook (18) is formed on the shoes, so the shoelaces (5a, 5b) can be fixed when the fixing buckle (11) is inserted into the hook (18).
- 4. Shoes whose shoelace is tightened by one pulling in accordance with claim 1, the eyelet (120) is formed on a wing strip (3) and fixed on the eyelet tab (110), so the sub-hole (1) is exposed outside.
- 5. Shoes whose shoelace is tightened by one pulling in accordance with claim 1, wherein a fixing buckle (11) which is folded at a fixing body (6) is formed on the forward part of the shoelaces (5a, 5b) so the shoelaces (5a, 5b) can be fixed at ease.
- 6. Shoes whose shoelace is tightened by one pulling in accordance with claim 1, wherein the hook (18) which includes the fixing body (6) has elasticity coming from a tetragonal box made of a bent metal board with the result that the fixing body (6) can be inserted easily. A hooking sill (24) is formed on the forward part of two facets of the box confronted each other in order that the fixing body (6) which is inserted may not be removed and a combining strip (12) is prolonged and installed on another two facets for combining with the shoes.
- 7. Shoes whose shoelace is tightened by one pulling in accordance with claim 5, wherein a protecting protrusion from detachment (7) is formed in the hook ledge (14) of the fixing buckle (11) by the pressing method of drawing, so that the shoelaces (5a, 5b) are protected from being slipped away incidently.

Fig. 1

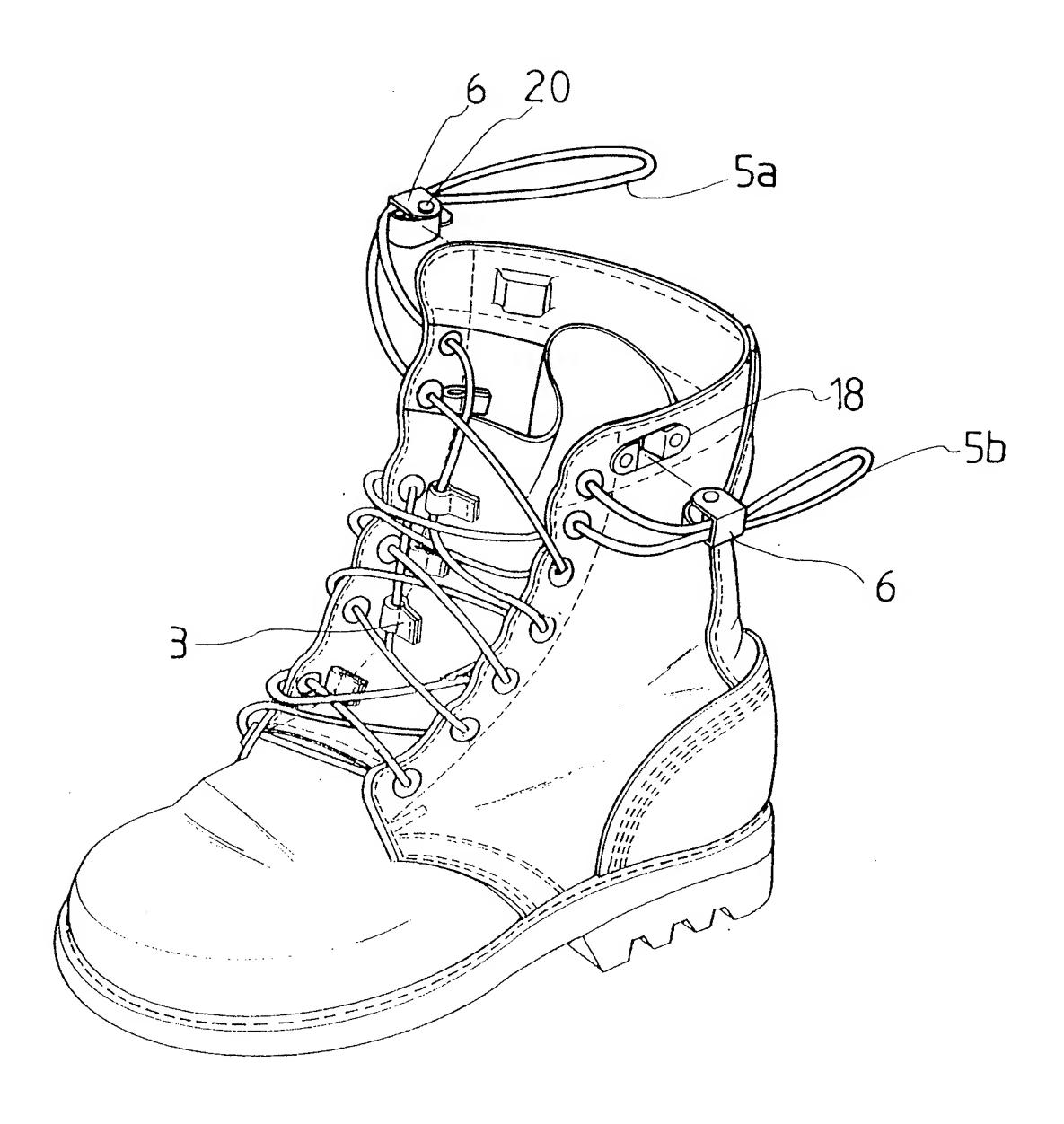


Fig. 2

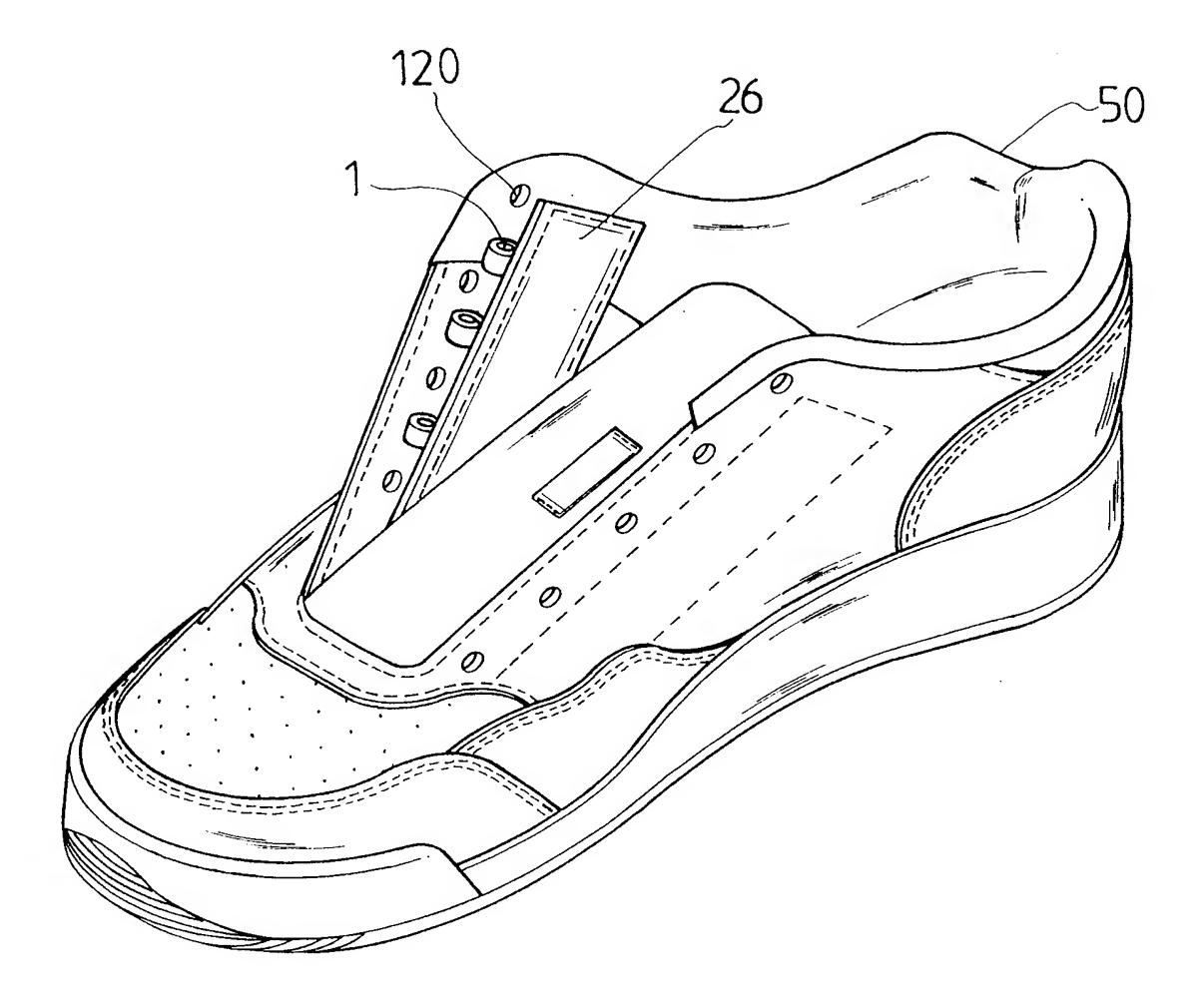


Fig. 3

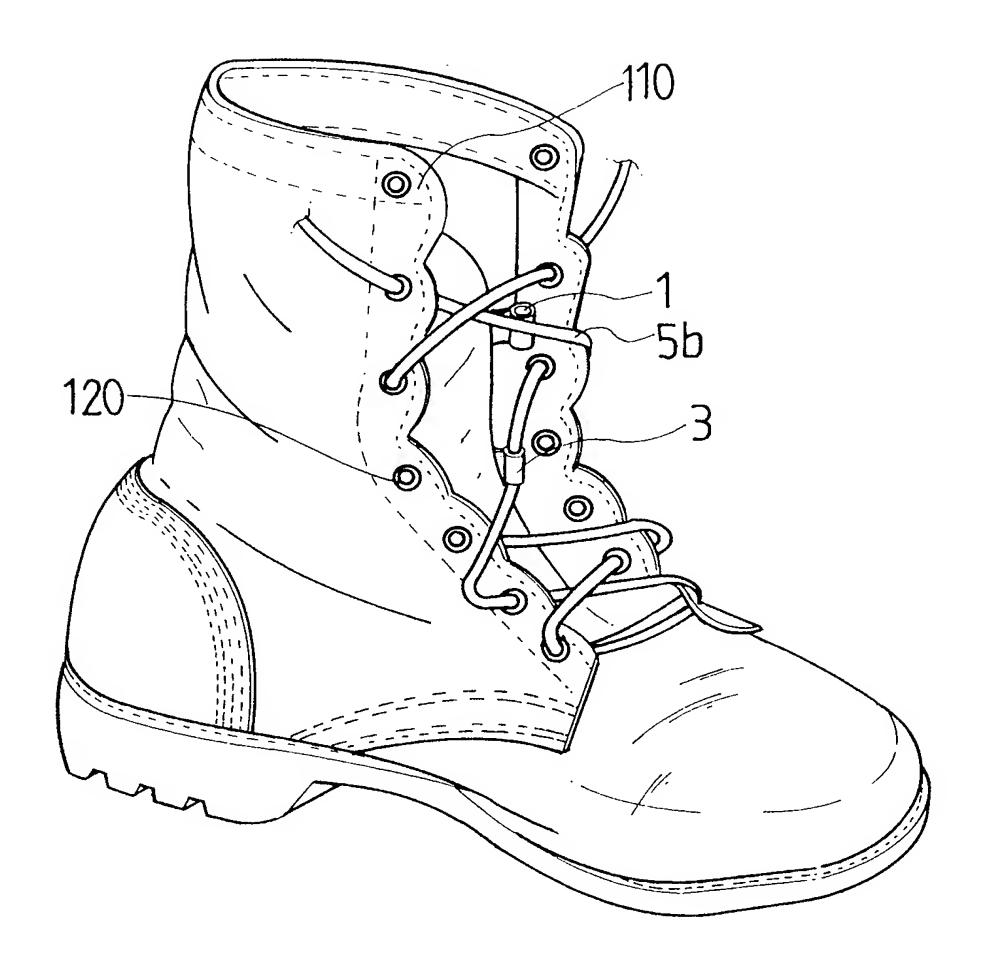


Fig. 4

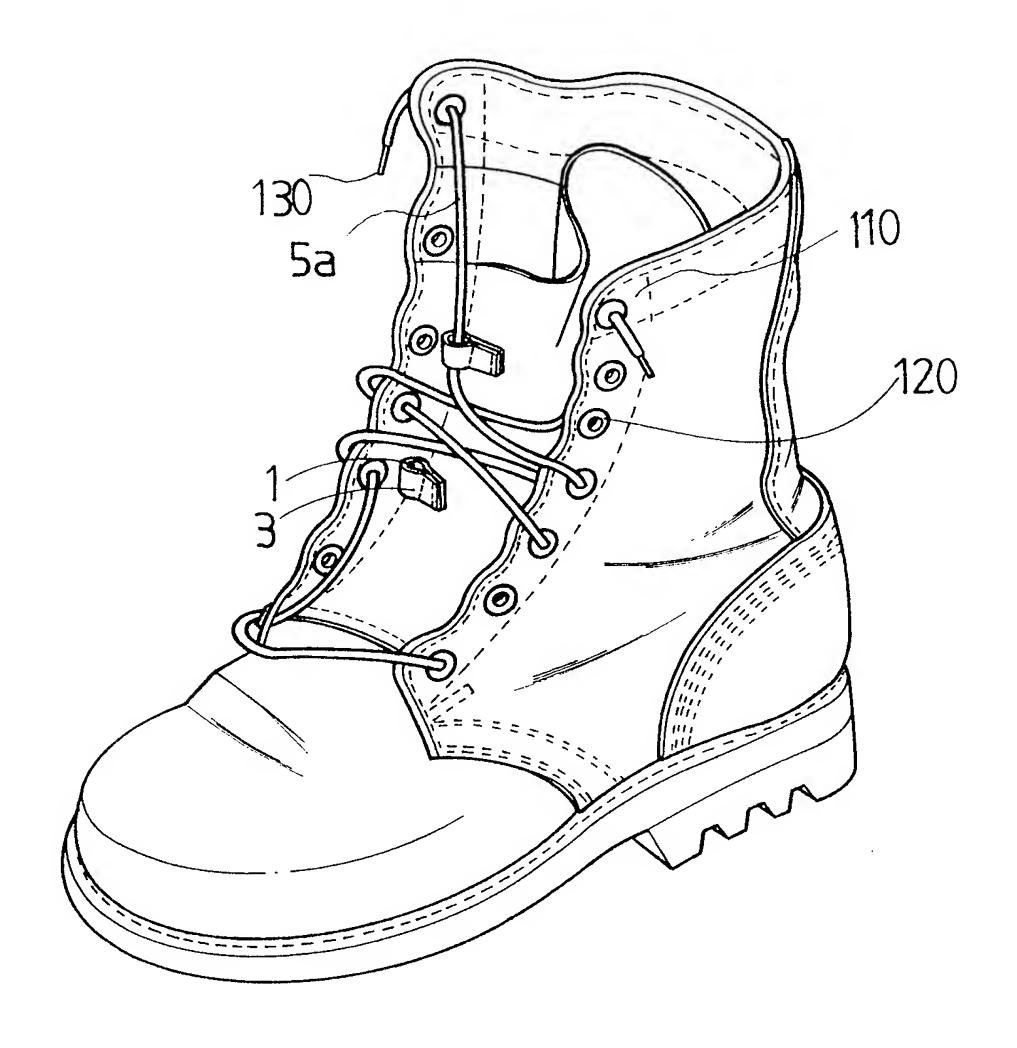


Fig. 5

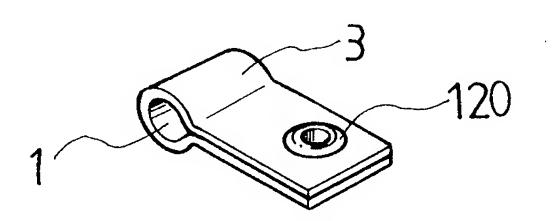


Fig. 6

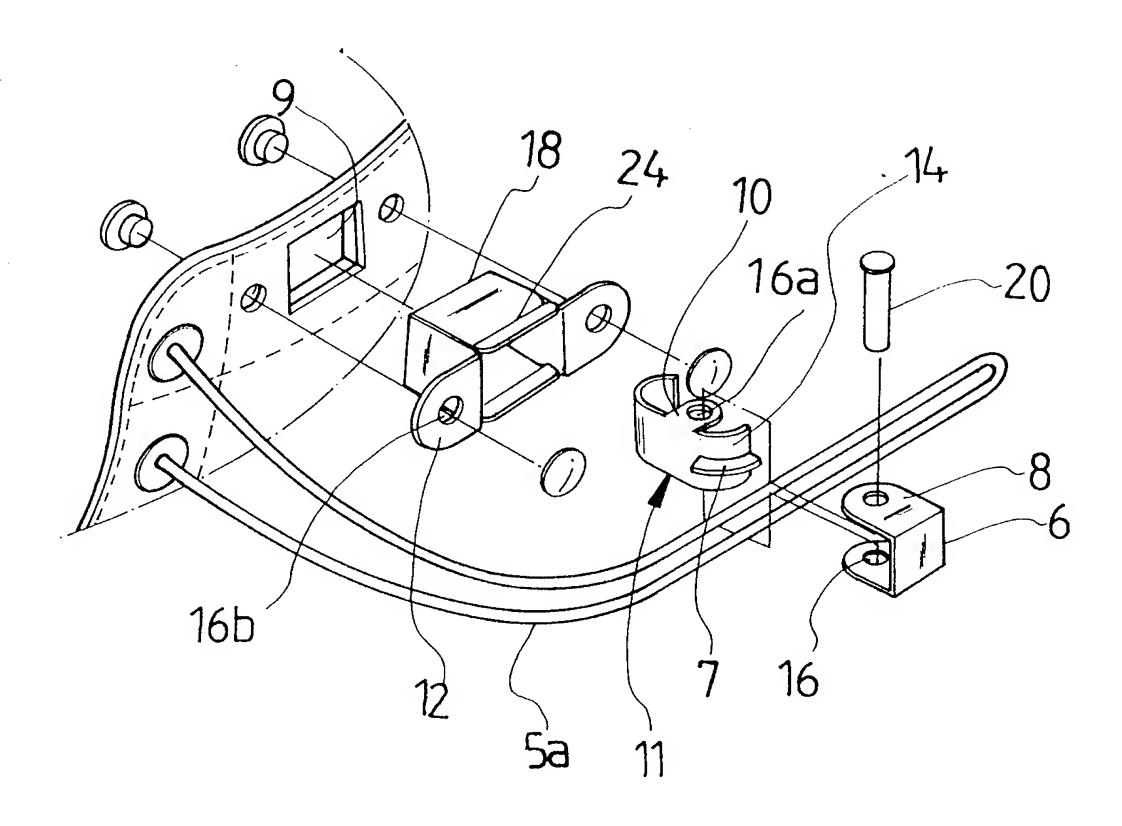


Fig. 7

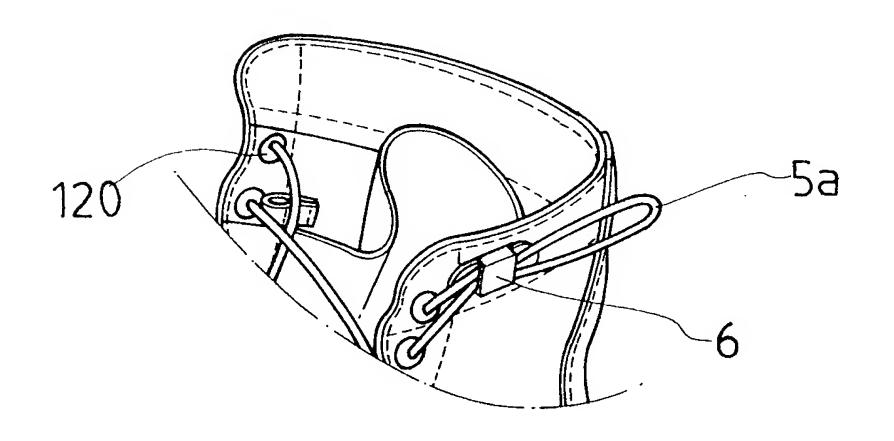


Fig. 8.

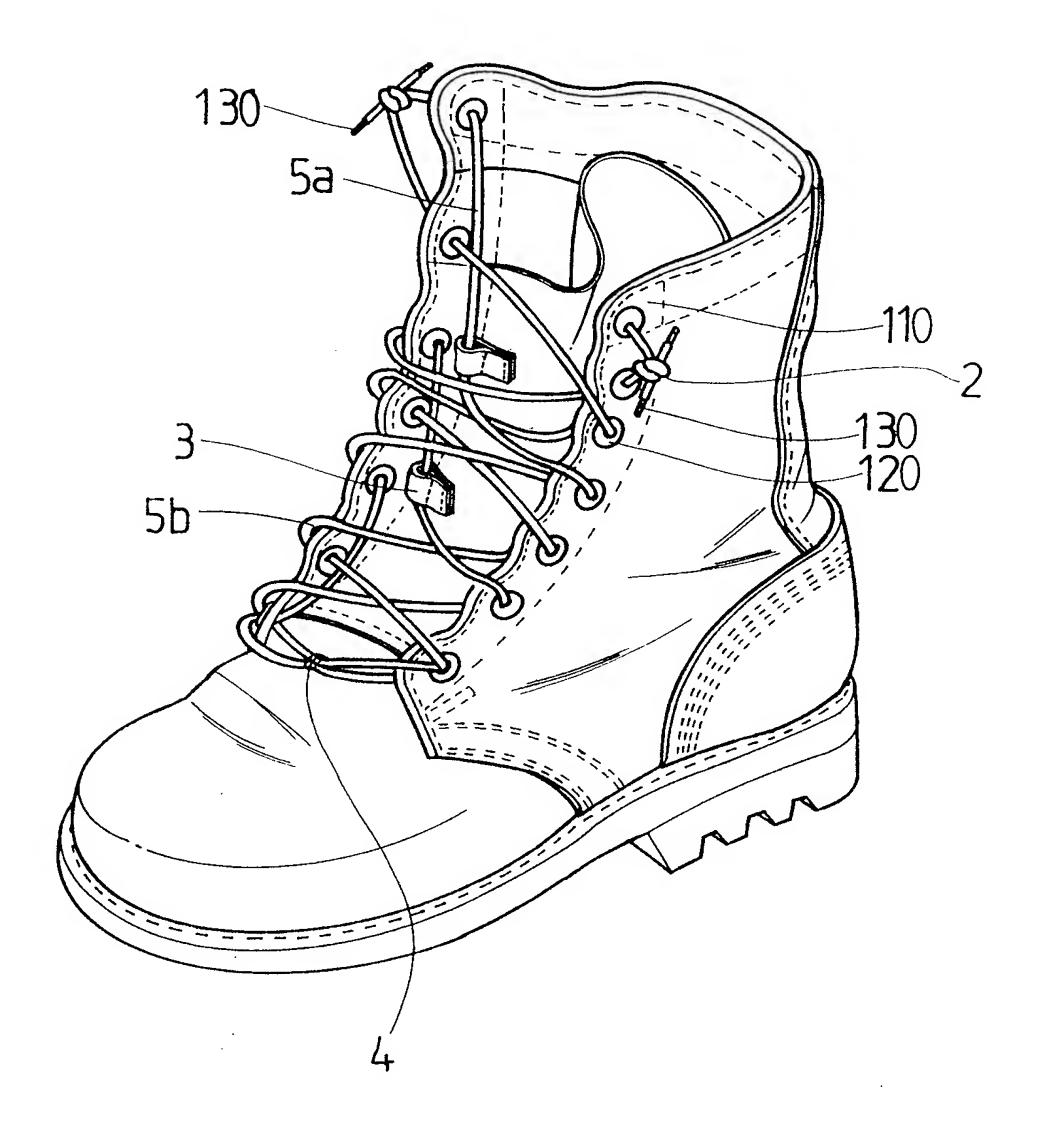


Fig. 9

